

Appendix A

APPENDIX A: ENVIRONMENTAL QUESTIONNAIRE FOR WIFIA CREDIT ASSISTANCE PROJECTS

This questionnaire will be used for most projects receiving WIFIA credit assistance and supports the Programmatic Environmental Assessment (PEA) “tiering” framework, the PEA’s associated preliminary Finding of No Significant Impact (FONSI), and project-specific NEPA documentation for the WIFIA program. WIFIA credit assistance to SRF programs should use the questionnaire in Appendix B.

1. Project title:

Bull Run Treatment Projects

2. Prospective Borrower:

Portland Water Bureau (PWB)

3. Project description:

PWB has initiated three projects in order to make two important improvements to the Bull Run water supply. These improvements are required under state and federal law. The first project, Improved Corrosion Control Treatment (ICCT) will further adjust the chemistry of Portland’s water, reducing potential levels of lead at the tap. Improved corrosion control will be in place by 2022. The second project, the Bull Run Filtration Facility will remove the microorganism Cryptosporidium and other potential contaminants. The third project will construct large diameter transmission pipelines to connect the proposed filtration facility to the existing conduit transmission system. The new filtration facility and transmission pipelines will be in operation by 2027. These projects will help keep our water safe and abundant for generations to come.

4. Project location (briefly describe the surroundings and environment around the project location and attach map, as necessary):

See Attachment A for the project location description.

5. Project type: (Check all that apply):

<input type="checkbox"/>	Wastewater Projects
<input checked="" type="checkbox"/>	Drinking Water Projects
<input type="checkbox"/>	Energy Efficiency Enhancement Projects
<input checked="" type="checkbox"/>	Repair, Rehabilitation, and Replacement Projects

<input type="checkbox"/>	Brackish or Seawater Desalination Projects
<input type="checkbox"/>	Drought Prevention, Reduction, or Mitigation Projects
<input type="checkbox"/>	Acquisition of Real Property Projects
<input type="checkbox"/>	A combination of Wastewater or Drinking Water Projects
<input type="checkbox"/>	Other [Please explain]

6. Describe any environmental permits needed for the project (e.g., federal, state, local) and the status of any permit:

See Attachment B for the list of environmental permits that will be required for the projects and their status.

A. LAND USE:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Conversions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to non-agricultural use as defined under the Farmland Protection Act 7 U.S.C. 4201 et seq.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Conflicts with any applicable land use plan, policy, act, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, habitat conservation plan, specific plan, local plan, or zoning ordinance).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to land use, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. Construction of the filtration facility will take approximately 77 acres of Farmland of Statewide importance out of agricultural production defined by FPPA. The level of impact for the filtration facility was determined to be below the FPPA impact threshold. The pipelines will have only a temporary impact to agricultural production; therefore, construction of the pipelines will not contribute to the FPPA impact. The ICCT project does not impact any agricultural lands.
2. Local land use - All projects will be compatible with all local land programs and policies. Local land use permits will be acquired for all projects prior to construction. See proposed mitigation measure listed below that would further minimize this impact.

Supporting Impact Analysis For filtration facility: The proposed filtration facility site is considered a foundational agricultural area by the Oregon Department of Agriculture and a farmland of statewide importance by the Natural Resources Conservation Service (NRCS). In accordance with the Farmland Protection Policy Act (FPPA) the proposed filtration facility site was evaluated by NRCS and PWB using the Agricultural Land Evaluation and Site Assessment (LESA) using USDA form AD -1006 (Attachment C). The LESA evaluation shows that the proposed filtration facility site has a score of 158 points which is below the FPPA impact threshold of 160 points. Therefore, the filtration facility will have a less than significant impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

Proposed Mitigation Measures:

- Project designs, construction and on-going operation & maintenance will be compatible with state, tribal, and local land use plans, programs and policies.

B. AIR QUALITY:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Conflicts with or delays in implementation of any applicable federal, state, or local air quality plan.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Violations of any air quality standards or contributions to an existing or projected air quality violation (including protected areas designated as mandatory Federal "Class I").	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Increases in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Releases of objectionable odors, such as hydrogen sulfide.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to air quality, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. None of the proposed projects will conflict with or delay the implementation of any applicable federal, state or local air quality plans.
2. None of the proposed projects will violate or contribute to any existing or projected air quality violations.
3. The proposed projects may increase several air pollutants of concern and ozone precursors during construction and as part of on-going operations. These are: a.) dust; b.) heavy equipment emissions (attributed to construction activities); and c.) ozone precursors (attributed to treatment processes, power generation and increased vehicular traffic) during project construction and operation. The air pollutants of concern and the ozone precursors will be mitigated for to ensure they do not exceed state air quality standards and minimizing the production of ozone precursors. See proposed mitigation measure listed below that would further minimize this impact.
4. The proposed projects will not release objectionable odors.

Proposed Mitigation Measures:

- Construction specifications will require that all construction equipment comply with the Oregon Clean Diesel Initiative. This initiative includes strategies to reduce diesel exhaust, burn less fuel, burn cleaner fuel and retrofitting construction equipment to burn cleaner fuels. This mitigation measure would both reduce emissions and ozone precursors.
- Chlorine used in the operation of the filtration facility will be liquid and not gas, thus

chlorine scrubbers will not be required.

- Ozone systems installed and operated at the filtration facility will include an installation and operation of ozone destruction unit.
- Project designs will be energy efficient designs and technologies to reduce ozone precursors.
- PWB is investigating the potential use of grid renewable or low-carbon energy sources for the filtration facility operation to reduce ozone precursors.

C.NOISE AND VIBRATION:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Permanent increases in ambient noise levels in the project vicinity above levels existing without the project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Temporary or periodic increases in ambient noise levels in the project vicinity above levels existing without the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Generation of vibration that could increase the risk of structural damage.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to noise and vibration, including those that reduce a significant impact to less than significant. Please provide references and supporting documents:

Level of Impacts Conclusion:

1. None of the proposed projects will generate noise levels in excess of standards established in the local noise ordinance or applicable standards of other agencies.
2. The ICCT and pipelines will not increase noise levels in the project vicinity above levels existing without project. The filtration facility may increase noise levels but not above allowable Multnomah and Clackamas County noise limits.
3. Construction of the projects will temporarily increase the ambient noise levels in the project vicinity above level existing without the projects. See proposed mitigation measures listed below that would further minimize this impact.
4. Construction of the projects will temporarily generate vibration that could increase the risk of structural damage. See proposed mitigation measures listed below that would further minimize this impact.

Proposed Mitigation Measures:

- Development and implementation of a Noise Mitigation Plan that will meet Multnomah and Clackamas County noise standards and will outline the use of general noise reduction measures for all construction activities.
- Implementation of vibration and noise thresholds that will be adhered to during construction as dictated by the construction contract specifications and local land use permits.
- Implementation of noise thresholds for long-term operation of the facilities.
- Implementation of vibration monitoring pre-construction (baseline) and during construction.

- Potentially change work hours or change the route for construction equipment.
- Changing construction methods to reduce the use of construction methods that generate vibration and noise.
- Reduce noise and vibration levels to industry standards or less.
- Continue outreach with neighbors to monitor effectiveness of implemented mitigation measures and provide an opportunity to incorporate feedback.

D. GEOLOGY AND SOILS:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Exposure of people or structures to hazards from unstable soils, landslide, lateral spreading, subsidence, liquefaction or collapse.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Increase in soil erosion or loss of topsoil.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Loss of economic viable mineral deposits, scientifically significant paleontological resources, or unique geological features.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to geology and soils, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. Construction of the project may expose construction personnel and equipment to hazards from unstable soils, lateral spreading, subsidence or collapse. This risk is anticipated to return to existing levels or lessen after completion of project construction. See proposed mitigation measures listed below that would further minimize this impact.
2. Construction may increase soil erosion and loss of topsoil. This risk is anticipated to return to existing levels or lessen after completion of project construction. See proposed mitigation measures listed below that would further minimize this impact.
3. None of the proposed projects will generate a loss of economic viable mineral deposits, scientifically significant paleontological resources or unique geologic features.

Proposed Mitigation Measures:

- Construction could include vegetation removal, grubbing, excavation, grading, and trenching. All such work will be performed to state/federal safety standards/OSHA with appropriate soil support, shoring, and scaffolding, etc.
- Risk of exposure will be mitigated to the reasonable extent possible including tunneling under slopes and ground improvement. Construction practices and facilities will be designed or reviewed (as appropriate) by licensed geologists and geotechnical engineers.
- Site specific seismic investigations that would inform design of seismically hardened facilities.
- Development and Implementation of an Erosion and Sediment Control and Site Stabilization Plans that would outline best management practices (BMPs).

E. WATER RESOURCES:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Violations of any water quality standards or waste discharge requirements, including degradation of water quality.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Depletion or contamination of groundwater supplies (including sole-source aquifers) or negatively interfere with groundwater recharge.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Alteration of the drainage pattern of a water resource that would result in an increase in erosion or flooding on- or off-site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Soil erosion or stormwater runoff that increases sediment, pollutants, or contaminates into streams, rivers, or other water resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Floodplain modification, development within, or redirection, as defined by executive order 11988.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Increase in flood risk affecting loss on human safety, health, and welfare.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Loss, degradation, or destruction of wetlands and waterbodies through direct removal, filling, hydrological interruption, or other means.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Alteration of wild and scenic rivers as defined by the Wild and Scenic River Act 16 U.S.C. 1271 et seq.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Conflicts with the Rivers and Harbors Act, 33 U.S.C. 403.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Conflicts with the Coastal Barrier Resources Act, 16 U.S.C. 3501 et seq.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Conflicts with the Coastal Zone Management Act, 16 U.S.C. 1451 et seq.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to water resources, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. *Water Quality:* None of the projects will violate any water quality standards or waste discharge requirements, including degradation of water quality.
2. *Groundwater:* None of the projects will deplete or contaminate groundwater supplies (including sole- source aquifers) or negatively interfere with groundwater recharge.
3. *Alteration of Drainage Patterns:* None of the projects will alter the drainage pattern of a water resource that would result in an increase in erosion or flooding on- or off-site.

4. *Soil Erosion and Stormwater Runoff*: Soil erosion and stormwater runoff will temporarily increase during construction of the projects. Also, construction of the filtration facility project will permanently increase the impervious area and thus increase the stormwater runoff from the sites. For both projects the stormwater runoff will be collected on-site and discharged to a new stormwater basin that will slowly release to the headwaters of Johnson Creek and other local drainages. Additionally, filtration facility operational overflows will not be allowed to sheet flow to Johnson Creek but will be recirculated through the filtration facility. For the ICCT project it is assumed that for the small amount of impervious area that is created that stormwater runoff would infiltrate on-site. Additionally, the following mitigation measures will be implemented for all the projects:
a.) Implementation of erosion and sediment control measures and BMPs for construction of all projects; b.) Development and implementation of a Stormwater Management Plan for all projects that complies with the City of Portland Stormwater Design Manual; and c.) Development and implementation of a Stormwater Maintenance and Inspection Plans for the filtration facility and the ICCT projects.
5. *Floodplains*: The ICCT, filtration facility and pipeline projects are not located in the floodplain and therefore will not result in modification, development within, or redirection, as defined by executive order 11988.
6. *Increase of Flood Risk*: None of the projects will increase flood risk because there will be no permanent changes to the floodplain or direct discharges to waterways.
7. *Wetlands*: The filtration facility and ICCT projects will not cause the loss, degradation, or destruction of wetlands. The pipelines project construction may temporarily impact wetlands. These temporary wetland impacts would be mitigated after construction by restoring the wetland section that are temporarily impacted or to provide off-site mitigation. It is assumed that most of the pipeline waterway crossings would occur under riparian areas and waterways via horizontal boring or jacking in all areas where it is technically feasible.
8. *Wild and Scenic Rivers*: There are no Wild and Scenic Rivers located within the project area.
9. *Rivers and Harbors Act*: There are no navigable waters located within the project area.
10. *Coastal Barrier Resources*: There are no Coastal Barrier Resources located within the project area.
11. *Coastal Zones*: There are no Coastal Zones located within the project area.

F. BIOLOGICAL RESOURCES:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Jeopardizing the continued existence of any threatened or endangered species identified in local or regional plans, policies, or regulations, or by the U.S. Fish and Wildlife Service or National Marines Fisheries Service.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Modification, fragmentation, or degradation of critical habitat identified in local or regional plans, policies, or regulations, or by the U.S. Fish and Wildlife Service or National Marines Fisheries Service.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Harm to fauna, including mammals, birds, reptiles, amphibians, fish, and invertebrates.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Changes in vegetation type (native to the region), particularly if the vegetation type in the region is already highly fragmented because of human activity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Modification, fragmentation, or degradation of biological sensitive areas other than those mentioned above.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disturbances to marine mammals protected by the Marine Mammal Protection Act as defined under 16 U.S.C 1361-1407.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Disturbances to Bald or Golden Eagles as defined under 16 U.S.C. 668 et seq.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Disturbances to migratory birds as defined under 16 U.S.C. 703-712 as amended.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, state, or federal habitat conservation plan.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Introduction or spread of invasive species as identified under Executive Order 13112.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to biological resources, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. *Threatened or Endangered Species:* None of the projects will jeopardize the continued existence of and threatened or endangered species. All new stormwater facilities will meet the City of Portland stormwater treatment requirements.
2. *Critical Habitat:* The filtration facility and the pipelines projects will not modify, fragment, or

degrade critical habitat identified in local or regional plans, policies, or regulations, or by the U.S. Fish and Wildlife Service or National Marines Fisheries Service. Most of the ICCT project is within the Multnomah County Significant Environmental Concern – Habitat (SEC-h) overlay zone. As part of the Multnomah County land use permit, mitigation has been identified for the potential habitat loss even though there is no modification, fragmentation or degradation of critical habitat.

3. *Fish and Wildlife:* None of the projects will cause harm to fauna, including mammals, birds, reptiles, amphibians, fish, and invertebrates. Although there will be potential for minimal temporary impacts to local wildlife during construction.
4. *Vegetation:* None of the projects will change the vegetation types native to the region. All vegetation/restoration plans will require plant species native to this region.
5. *Other Biologically Sensitive Areas:* None of the projects will modify, fragment, or degrade any biological sensitive areas.
6. *Marine Mammals:* None of the projects are located in or near a marine environment and therefore will not cause a disturbance to marine mammals protected by the Marine Mammal Protection Act as defined under 16 U.S.C 1361-1407.
7. *Bald or Golden Eagles:* None of the projects will cause disturbance to Bald or Golden Eagles defined under 16 U.S.C. 668 et seq. There are no Bald Eagles or Golden Eagles in the ORBIC data for the project area.
8. *Migratory Birds:* All projects will strive to avoid and minimize disturbance to migratory birds as defined under 16 U.S.C. 703-712 as amended. Construction specification will require that all tree and shrub removal and limbing shall occur outside the migratory bird nesting window (March 15 to August 31). The City of Portland Standard Construction Specifications “Red Book” (2010) section 00290.36 (a) details the BMP when migratory bird nests are found within the project area.
9. *Habitat Conservation Plans:* None of the projects will conflict with the provisions of the PWB adopted Habitat Conservation Plan, or other approved local, regional, state, or federal habitat conservation plan.
10. *Invasive Species:* All project will implement BMPs that will minimize the introduction and spread of invasive species as identified under Executive Order 13112. All project construction and operation will be required to adhere to the “Portland Water Bureau Invasive Plant Standard Operating Protocol for the Bull Run Watershed Management Unit” (August 2013). Additionally, all invasive species that are currently within the project construction footprint will be removed during the construction of the three projects.

G. CULTURAL RESOURCES:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Changes to historical resources, including archaeological and cultural resources as defined in 36 CFR part 800.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Modification of unique paleontological resources or site or unique geologic features.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Disturbance of human remains, including those interred outside of formal cemeteries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to cultural resources, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. *Historic Resources:* It is anticipated that project construction will not change known historical properties including archaeological and cultural resources as defined in 36 CFR part 800. All project construction will implement an Archaeological Monitoring and Inadvertent Discovery Plan.
2. *Unique Paleontological Resources or Geologic Features:* None of the projects will modify unique paleontological resources or unique geologic features.
3. *Human Remains:* It is anticipated that project construction will not disturb human remains, including those interred outside of formal cemeteries, as none are known to be present. All project construction will follow an Archaeological Monitoring and Inadvertent Discovery Plan, including a protocol for Treatment of Native American Human Remains.

Proposed Consultation and Mitigation Measures:

- Complete Section 106 compliance process with SHPO and appropriate tribes, as well as EPA.
- In consultation with SHPO, appropriate tribes and EPA, development and implementation of an "Archaeological Monitoring and Inadvertent Discovery Plan", including a protocol for Treatment of Native American Human Remains that would be followed for all ground disturbing activities (e.g. investigations & construction).

H. SOCIOECONOMIC AND ENVIRONMENTAL JUSTICE:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Changes to the demographics around project location, such as population growth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Modifications to economic factors such as per capita income, unemployment rate, or poverty.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Alterations to social assets, such as housing or public services.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Disproportionate high and adverse human health environmental effects on minority population and low-income populations as defined under Executive Order 12898.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to socioeconomic resources and environmental justice, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. None of the projects will change the demographics around project locations, such as population growth.
2. None of the projects will modify economic factors such as per capita income, unemployment rate, or poverty.
3. None of the projects will alter social assets, such as housing or public services.
4. None of the projects will have disproportionate high and adverse human health environmental effects on minority population and low-income populations as defined under Executive Order 12898. Minority and low-income populations are not located within the project area.

I. TRANSPORTATION AND TRAFFIC:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Changes to traffic patterns around the project area including, but not limited to, the arrival and departure of construction workers, vehicles hauling equipment and materials to the site, road closures or detours, and slower movement and larger turning radii of truck going to project site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to transportation and traffic, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. All projects will temporarily change traffic patterns around the project area including, but not limited to, the arrival and departure of construction workers, vehicles hauling equipment and materials to the site, road closures or detours, and slower movement and larger turning radii of trucks going to project site.

Proposed Mitigation Measures:

- Coordination with local transportation agencies (Multnomah & Clackamas Counties)
- A traffic construction impact analysis will be completed in Winter 2021 that will identify detailed traffic mitigation measures.
- Implementation of Traffic Control Plans for each project that will include haul routes, alternate work hours, warning signage, flag persons, and Use of lane closures and detours.
- Ongoing communication with neighbors to ensure proposed mitigation measures are effective.

J. UTILITIES AND COMMUNITY SERVICES:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Changes to electric, cable, gas, sewer, water, stormwater, and other existing utility services.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Changes to community services, such as open space, recreational and cultural facilities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to utilities and communication, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. Construction of the pipelines may cause temporary service disruption for electric, cable, gas, sewer, water, stormwater, and other existing utility services.
2. Construction of the pipelines may cause temporary impacts to recreational facilities (i.e. Dodge Park).

Proposed Mitigation Measures:

- Identification and avoidance of buried utilities during land disturbing construction activities, if possible.
- Coordination with service providers and planning for minimization of service interruptions.
- Coordination with park and recreational resource managers/agencies for minimization of impacts to community resources (such as access to Dodge Park) due to construction equipment traffic and potential road closures.

K. HAZARDOUS AND TOXIC MATERIALS AND WASTE:	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Accidental releases, spills, or improper storage and disposal of hazardous materials.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Conflicts with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Solid Waste Disposal Act, Toxic Substances Control Act, and Emergency Planning and Community Right-to-Know Act.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to hazardous and toxic materials and waste including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. The likelihood of accidental releases, spills, or improper storage and disposal of hazardous materials during construction or operation of the projects is low. See proposed mitigation measure listed below that would further minimize this impact to less.
2. None of the projects will conflict with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Solid Waste Disposal Act, Toxic Substances Control Act, and Emergency Planning and Community Right-to-Know Act.

Proposed Mitigation Measures:

- Development and implementation of a Pollution Prevention and Spill Protection Plan that will minimize spills and leaks from vehicles and equipment.
- Compliance with applicable hazardous and toxic materials laws and regulations
- Implementation of environmental protection measures, BMPs, and SOPs

L.	HUMAN HEALTH AND SAFETY:	IMPACT ANTICIPATED		
		NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1.	Creating occupational health hazards for workers during construction or operation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.	Creating or contributing to environmental health risks and safety risks that may disproportionately affect children.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Creating or contributing to public health risk of immediate injury or long-term health hazards.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide mitigation measures related to human health and safety, including those that reduce a significant impact to less than significant. Please provide references and supporting documents.

Level of Impacts Conclusion:

1. All the projects may create occupational health hazards for workers during construction and operation.
2. None of the projects will create or contribute to environmental health risks and safety risks that may disproportionately affect children.
3. None of the projects will create or contribute to public health risk of immediate injury or long-term health hazards.

Proposed Mitigation Measures:

- Implementation of a project specific health and safety plans for construction and operation of the projects.
- Limiting site access to authorized personnel only.
- Implementation of air and noise minimization measures.

M. CUMULATIVE IMPACTS	IMPACT ANTICIPATED		
	NO IMPACT	LESS THAN SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT IMPACT
1. Land Use.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Air Quality.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Noise and Vibration.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Geology and Soils.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Water Resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Cultural Resources.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Socioeconomic and Environmental Justice.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Transportation and Traffic.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Utilities and Community Services.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Hazardous and Toxic Materials and Waste.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Human Health and Safety.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Please provide all mitigation measures **not identified previously** in the document that will be included in the project. Identify any mitigation measures that reduce a significant impact to less than significant.

All potential mitigation measures can be found in the previous pages of this document. No significant impacts were identified for any of the impact (resources) areas.